

Section 2.106 Table of Frequency Allocations.

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International Table			United States Table		FCC use designators	
Region 1 Allocation MHz	Region 2 Allocation MHz	Region 3 Allocation MHz	Government Allocation MHz	Non-Government Allocation MHz	Rule Part(s)	Special-Use Frequencies
(1)	(2)	(3)	(4)	(5)	(6)	(7)
* *			* *		* *	
	3700-4200 FIXED. FIXED-SATELLITE (space-to-Earth). MOBILE except aeronautical mobile. 787		3700-4200	3700-4200 FIXED. FIXED-SATELLITE (space-to-Earth). NG41	DOMESTIC PUBLIC FIXED (21). SATELLITE COMMUNICATIONS (25). PRIVATE OPERATIONAL- FIXED MICROWAVE (94).	
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International Table			United States Table		FCC use designators	
Region 1 Allocation MHz	Region 2 Allocation MHz	Region 3 Allocation MHz	Government Allocation MHz	Non-Government Allocation MHz	Rule Part(s)	Special-Use Frequencies
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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5925-7075	FIXED. FIXED- SATELLITE (Earth-to- space). MOBILE. 791 792A 809		5925-7125 791 809	5925-6425 FIXED. FIXED-SATELLITE (Earth-to- space). NG41	DOMESTIC PUBLIC FIXED (21). SATELLITE COMMUNICATIONS (25). PRIVATE OPERATIONAL- FIXED MICROWAVE (94).	
				6425-6525 FIXED-SATELLITE (Earth-to- space). MOBILE. 791 809	AUXILIARY BROADCAST (74). CABLE TELEVISION (78). DOMESTIC PUBLIC FIXED (21). PRIVATE OPERATIONAL- FIXED MICROWAVE (94).	
				6525-6875 FIXED. FIXED-SATELLITE (Earth-to- space). 792A 809	DOMESTIC PUBLIC FIXED (21). PRIVATE OPERATIONAL FIXED MICROWAVE (94).	

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International Table			United States Table		FCC use designators	
Region 1 Allocation GHz	Region 2 Allocation GHz	Region 3 Allocation GHz	Government Allocation GHz	Non-Government Allocation GHz	Rule Part(s)	Special-Use Frequencies
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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10.55-10.60	FIXED. MOBILE except aeronautical mobile. Radiolocation.		10.55-10.60	10.55-10.60 FIXED.	DOMESTIC PUBLIC FIXED (21). PRIVATE OPERATIONAL FIXED MICROWAVE (94).	
10.60-10.68	EARTH EXPLORATION- SATELLITE (passive). FIXED. MOBILE except aeronautical mobile. RADIO ASTRONOMY. SPACE RESEARCH (passive). Radiolocation. 831 832		10.60-10.68 EARTH EXPLORATION - SATELLITE (passive) SPACE RESEARCH (passive) US26 US277 5	10.60-10.68 EARTH EXPLORATION- SATELLITE (passive). FIXED. SPACE RESEARCH (passive). US265 US277	DOMESTIC PUBLIC FIXED (21). PRIVATE OPERATIONAL FIXED MICROWAVE (94).	

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International Table			United States Table		FCC use designators	
Region 1 Allocation GHz	Region 2 Allocation GHz	Region 3 Allocation GHz	Government Allocation GHz	Non-Government Allocation GHz	Rule Part(s)	Special-Use Frequencies
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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10.7-11.7 FIXED. FIXED-SATELLITE (space-to-Earth) (Earth-to-space). 835 MOBILE except aeronautical mobile. 792A	10.7-11.7 FIXED. FIXED-SATELLITE (space-to-Earth). MOBILE except aeronautical mobile. 792A		10.7-11.7 US211	10.7-11.7 FIXED. FIXED-SATELLITE (space-to-Earth). 792A US211 NG41 NG104	DOMESTIC PUBLIC FIXED (21). PRIVATE OPERATIONAL-FIXED MICROWAVE (94).	
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Proposed FCC Rules and Regulations

- II. Part 21 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 21 - DOMESTIC PUBLIC FIXED RADIO SERVICES

1. The authority citation in Part 21 continues to read:

AUTHORITY: Secs. 1, 2, 4, 201-205, 208, 215, 218, 303, 307, 313, 314, 403, 404, 410, 602; 48 Stat. as amended, 1064, 1066, 1070-1073, 1076, 1077, 1080, 1082, 1083, 1087, 1094, 1098, 1102; 47 U.S.C. 151, 154, 201-205, 208, 215, 218, 303, 307, 313, 314, 403, 404, 602; 47 U.S.C. 552.

2. Subpart A is amended by revising section 21.2 to read as follows:

Section 21.2 Definitions.

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Automatic Transmit Power Control (ATPC). In a radio employing ATPC, the transmit power is reduced during normal operating conditions (typically by 10 dB below the authorized transmit power). When the receiver detects a reduction in signal level, a control signal is sent to the far end transmitter, instructing it to increase the power output to compensate for the signal reduction.

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3. Subpart C is amended by adding Sections 21.123 and 21.124 and by revising Sections 21.100, 21.107, 21.108, and 21.122 to read as follows:

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Section 21.100 Frequencies.

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(c) Frequency diversity transmission will not be authorized in these services in the absence of a factual showing that the required communications cannot practically be achieved by other means. Where frequency diversity is deemed to be justified on a protection channel basis, it shall be limited to one protection channel for the bands 3,700-4,200 MHz, 5,925-6,425 MHz, 6,525-6,875 MHz, and 10,550-10,680 MHz, and a ratio of one protection channel for three working channels for the band 10,700-11,700 MHz. In the bands 3,700-4,200 MHz, 5,925-6,425 MHz, 6,525-6,875 MHz, and 10,550-10,680 MHz, no frequency diversity protection channel will be authorized unless there is a minimum of three working channels, except that where a substantial showing is made that a total of

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Frequency band (MHz)	Maximum allowable transmitter power		Maximum allowable EIRP	
	Fixed (W)	Mobile (W)	Fixed (dBW)	Mobile (dBW)
512.0 to 2,110	20.0	20.0	(4)	.....
932.5 to 935.0	20.0	.....	+40	.....
941.5 to 944.0	20.0	.....	+40	.....
2,110 to 2,130	20.0	.....	.....	.....
2,150 to 2,160	(1) 20.0	.....	+45	.....
2,160 to 2,180	(1) 20.0	.....	.....	.....
2,500 to 2,686	(1) 10.0	.....	.....	.....
2,686 to 2,690	0.25	.....	.....	.....
3,700 to 4,200	20.0	.....	(2) +55	.....
5,925 to 6,425	20.0	.....	+55	.....
6,425 to 6,525	.....	20.0	.....	+35
6,525 to 6,875	10.0	.....	+55	.....
10,550 to 10,680	(5) 10.0	.....	(2) +55	.....
10,700 to 11,700	10.0	.....	(2) +55	.....
12,200 to 13,250	10.0	10.0	.....	.....
17,700 to 18,600	10.0	.....	+55	.....
18,600 to 18,800	(3) 10.0	.....	+35	.....
18,800 to 19,700	10.0	.....	+55	.....
21,200 to 23,600	10.0	.....	+50	.....
27,500 to 29,500	10.0	.....	+55	.....
31,000 to 31,300	0.05	0.05	.....	.....
38,600 to 40,000	10.0	1.5	+50	.....

Footnotes (1), (3), and (4) - * * *

(2) - Stations authorized or pending on **[Report and Order date]** need not comply with this standard.

(5) - The output power of a Digital Termination System nodal transmitter shall not exceed 0.5 watts per 250 KHz. The output power of a Digital Termination System user transmitter shall not exceed 0.04 watts per 250 KHz. The transmitter power in terms of the watts specified is the peak envelope power of the emission measured at the associated antenna input power. The operating power shall not exceed the authorized power by more than 10 percent of the authorized power in watts at any time.

(c) The power of each transmitter shall be maintained as near as practicable to the power input or output specified in the instrument of station authorization. For radios employing **auto-matic transmit power control (ATPC)**, this requirement applies to the maximum transmit power, when the ATPC function is disabled.

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Section 21.108 Directional antennas.

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(c) * * *

ANTENNA STANDARDS

Frequency (MHz)	Category	Maximum beam-width to 3 dB points (included angle in degrees)	Minimum antenna gain (dBi)	Minimum radiation suppression to angle in degrees from center-line of main beam in decibels							
				5°	10°	15°	20°	30°	100°	140°	
				to	to	to	to	to	to	to	
				10°	15°	20°	30°	100°	140°	180°	
932.5 to 935.0	A	14.0	NA	...	6	11	14	17	20	24	
941.5 to 944.0	B	20.0	NA	.....	6	10	13	15	20		
2,500 to 4,200	A	NA	36.0	23	29	33	36	42	55	55	
	B	NA	36.0	20	24	28	32	32	32	32	
5,925 to 6,425	A	NA	38.0	25	29	33	36	42	55	55	
(5)	B	NA	38.0	21	25	29	32	35	39	45	
6,525 to 6,875	A	NA	38.0	25	29	33	36	42	55	55	
(5)	B	NA	38.0	21	25	29	32	35	39	45	
10,550 to 10,680	A	NA	38.0	25	29	33	36	42	55	55	
(1) (5)	B	NA	38.0	20	24	28	32	35	35	39	
10,700 to 11,700	A	NA	38.0	25	29	33	36	42	55	55	
(5)	B	NA	38.0	20	24	28	32	35	35	39	
17,700 to 18,820	A	NA	38.0	25	29	33	36	42	55	55	
	B	NA	38.0	20	24	28	32	35	36	36	
18,920 to 19,700	A	NA	38.0	25	29	33	36	42	55	55	
(1)	B	NA	38.0	20	24	28	32	35	36	36	
21,200 to 23,600	A	NA	38.0	25	29	33	36	42	55	55	
	B	NA	38.0	20	24	28	32	35	36	36	
31,000 to 31,300	NA	4.0	38.0	NA	NA	NA	NA	NA	NA	NA	
(2) (3)											
Above 31,300	A	NA	38.0	25	29	33	36	42	55	55	
	B	NA	38.0	20	24	28	32	35	36	36	
5,925 to 6,425	A	NA	38.0	25	29	33	36	42	55	55	
(6)	B	NA	38.0	20	24	28	32	35	36	36	
6,525 to 6,875	A	1.5	NA	26	29	32	34	38	41	49	
(6)	B	2.0	NA	21	25	29	32	35	39	45	
10,550 to 10,680	A	3.4	34.0	20	24	28	32	35	55	55	
(1) (6)	B	3.4	34.0	20	24	28	32	35	35	39	

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Footnotes:

- (1) - Digital Termination User Station antennas in this band shall meet performance Standard B and have a minimum antenna gain of 34 dBi. The maximum beamwidth requirement does not apply to DTS User Stations. Digital Termination Nodal Stations need not comply with these standards.
- (2) - * * *
- (3) - * * *
- (4) - * * *
- (5) - These antenna standards apply to all stations authorized after **[Report and Order date + 3.5 years]**. Existing licensees and pending applicants on that date are grandfathered and need not comply with these standards.
- (6) - These antenna standards apply to all stations authorized or pending before **[Report and Order date + 3.5 years]**.

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(d) * * *

(e) These limitations are necessary to minimize the probability of harmful interference to reception in the bands 5925-6875 MHz on board geostationary space stations in the fixed-satellite service (Part 25).

(1) 5925 to 6875 MHz. * * *

(2) * * *

Section 21.122 Microwave digital modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 15 GHz shall, with appropriate multiplex equipment, comply with the following additional requirements:

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(1) Transmitters authorized after **[Report and Order date + 3.5 years]** shall meet the following requirements:

Nominal Channel Bandwidth (MHz)	Minimum Payload Capacity (Mbit/s)	Minimum Traffic Loading Payload (as a percent of the minimum payload capacity)	Typical Utilization
0.40	1.54	.....	1 DS1
0.80	3.08	.....	2 DS1
1.25	3.08	.....	2 DS1
2.50	6.17	.....	4 DS1
3.75	12.3	.....	8 DS1
5.0	18.5	.....	12 DS1
10.0	44.7	50	1 DS3 or STS1
20.0	89.4	50	2 DS3 or STS1
30.0	89.4	50	2 DS3 or STS1
40.0	134.1	50	3 DS3 or STS1

(i) If a transmitter is authorized to operate in a bandwidth which is not listed in paragraph (a)(1) of this section, it shall meet the minimum payload capacity and traffic loading requirements of the next largest channel bandwidth listed in the Table (e.g., if a radio operates in a 3.5 MHz authorized bandwidth, the minimum payload capacity shall be 12.3 Mbit/s).

(ii) Where transmitters employing digital modulation techniques are designed to be used so that two may simultaneously operate on the same frequency over the same path, the minimum traffic loading requirement is reduced from 50 percent to 25 percent for channel bandwidths of 10 MHz and greater.

(iii) For transmitters operating in the 932.5-944 MHz band, the minimum payload capacity and traffic loading requirements of paragraph (a)(1) of this section do not apply. In this band, the bit rate, in bits per second, shall be equal to or greater than the bandwidth specified by the emission designator in Hertz (e.g., to be acceptable, equipment transmitting at a 20 Mb/s rate must not require a bandwidth of greater than 20 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

(iv) Existing licensees and pending applicants on **[Report and Order date + 3.5 years]** are grandfathered and need not comply with the requirements of paragraph (a)(1) of this section.

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(2) Transmitters authorized or pending before [Report and Order date + 3.5 years] shall meet the following requirements:

Frequency (MHz)	Maximum Authorized Bandwidth (MHz)	Minimum Payload Capacity (64 Kbit/s channels or equivalent)	Minimum Traffic Loading Payload (64 Kbit/s channels or equivalent)
932.5 to 944.0	.....	.....	.....
2,110 to 2,130	3.5	96	.....
2,160 to 2,180	3.5	96	.....
3,700 to 4,200	20	1,152	900
5,925 to 6,425	30	1,152	900
6,525 to 6,875	.....	.....	.....
10,550 to 10,680	.....	.....	.....
10,700 to 11,700	10	288	120
10,700 to 11,700	20	576	240
10,700 to 11,700	30	1,152	900
10,700 to 11,700	40	1,152	900
13,200 to 13,250	.....	.....	.....

(i) The minimum payload capacity and traffic loading requirements shown in paragraph (a) (2) of this section may be reduced by a factor $1/N$ provided that N transmitters may be operated satisfactorily, over the same radio path, within an authorized bandwidth less than, or equal to, the maximum authorized bandwidth listed in the Table (e.g., (A) the 1152 channels requirement may be reduced to 576 if two transmitters can be satisfactorily operated over the same path within a 30 MHz maximum bandwidth for the 5,925-6,425 MHz band, or (B) reduced to 384 channels if three transmitters can be satisfactorily accommodated within this bandwidth).

(ii) The minimum traffic loading requirement of paragraph (a) (2) does not apply if the authorized bandwidth of a transmitter is less than 10 MHz.

(iii) Where transmitters employing digital modulation techniques are designed to be used so that two may simultaneously operate on the same frequency over the same path, the minimum traffic loading requirement of paragraph (a) (2) is reduced by half for the bands 3,700 to 4,200 MHz, 5,925 to 6,425 MHz, and 10,700 to 11,700 MHz (e.g., 900 channels is reduced to 450 channels).

(iv) For transmitters operating in the 932.5-944 MHz, 10,550-10,680 MHz, and 13,200-13,250 MHz bands, the bit rate, in bits per second, shall be equal to or greater than the bandwidth specified by the emission designator in Hertz (e.g., to be acceptable, equipment transmitting at a 20 Mb/s rate must not require a bandwidth of greater than 20 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

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(3) Where type accepted equipment is designed to operate on the same frequency in a cross-polarized configuration to meet the minimum payload capacity requirements of paragraphs (a) (1) or (a) (2) of this section, the Commission will require, at the time additional transmitters are authorized, that both polarizations of a frequency be used before a new frequency assignment is made, unless single transmitter installation was found to be justified by the Commission at the time it authorized the first transmitter.

(4) Exceptions to the requirements of paragraph (a) (1) or (a) (2) may be granted, upon a showing that:

(i) Over 50 percent of the necessary bandwidth of the transmitter is used for encoded video transmission;

(ii) No other technical alternatives are available; and

(iii) There is a substantial public benefit resulting from the proposed use of the spectrum.

(b) For the purposes of compliance with the emission limitation requirements of Section 21.106(a) (2) of this part and the requirements of paragraph (a) of this section, digital modulation techniques are considered as being employed when:

(1) digital modulation occupies 50 percent or more of the necessary bandwidth of a transmitter. This definition shall apply to all transmitters, except those employing frequency modulation; or

(2) digital modulation contributes 50 percent or more to the total peak frequency deviation of a transmitted radio frequency carrier, in a transmitter employing frequency modulation. The total peak frequency deviation shall be determined by adding the deviation produced by the digital modulation signal and the deviation produced by any frequency division multiplex (FDM)

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Section 21.123 Microwave analog modulation

(a) Except for transmitters employing digital modulation techniques, as defined in Section 21.122(b), equipment to be used for voice transmission shall meet the following requirements:

Frequency (MHz)	Maximum Authorized Bandwidth (MHz)	Minimum Traffic Loading Payload (4 KHz voice channels or equivalent) (1) (2)
Below 3,700	.....	.....
3,700 to 4,200	20	900 (3)
5,925 to 6,425	30	900 (3)
6,525 to 6,875	10	300 (4)
10,550 to 10,680	.....	.....
10,700 to 11,700	10	300 (4)
10,700 to 11,700	20	600 (4)
10,700 to 11,700	30	900 (3)
10,700 to 11,700	40	900
Above 11,700	.....	.....

Footnotes:

- (1) - The minimum traffic loading requirement does not apply if the authorized bandwidth of a transmitter is less than 10 MHz.
- (2) - The minimum traffic loading requirement does not apply if over 50 percent of the necessary bandwidth of a transmitter is used for video transmission.
- (3) - The minimum traffic loading for other authorized bandwidths is determined by using the 1/N rule of Section 21.122(a) (2) (i).

(4) - Transmitters authorized or pending before [Report and Order]

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Section 21.124 Minimum traffic loading

An application for an initial working channel over a given route will not be accepted where the anticipated traffic loading (within five years or other period subject to reasonable projection) is less than the minimum specified in Section 21.122(a) for digital modulation or Section 21.123(a) for analog modulation. Absent extraordinary circumstances, applications proposing additional frequencies over existing routes will not be granted unless it is shown that the traffic load will shortly exhaust the capacity of the existing equipment.

4. Subpart G is amended by deleting section 21.507 and by revising sections 21.502, 21.503, and 21.506 to read as follows:

Section 21.502 Frequencies.

(a) Frequencies in the 17,700 to 19,700 MHz band are available for assignment for all Digital Termination System (DTS) applicants. Assignment will consist of a pair of channels as set out in paragraph (c) of this section plus internodal channels as set out in paragraph (d) of this section.

(b) Licensees may apply for an additional channel pair in an SMSA only when it is operating its previously authorized DTS at or near the expected capacity and the service to be provided will fully utilize all spectrum requested.

(c) Digital Termination Systems assignments in the 17,700-19,700 MHz band shall be made according to the following plan:

Channel No.	Nodal station frequency band (MHz)	User station frequency band (MHz)
30.....	18,870-18,880	19,210-19,220
31.....	18,880-18,890	19,220-19,230
32.....	18,890-18,900	19,230-19,240
33.....	18,900-18,910	19,240-19,250
34.....	18,910-18,920	19,250-19,260

(d) Internodal link assignments are to be made in accordance with the provisions of Subpart I of Part 21, applying to point-to-point operations.

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(e) New applications for Digital Termination Systems in the 10,550-10,680 MHz band will not be accepted after **[Report and Order date]**. Existing licensees and pending applicants are permitted to submit applications for renewal and for additional nodal and associated user stations within the SMSA for which they have applied or have been authorized for use after that date. Frequency assignments in the 10,550-10,680 MHz band shall be made in accordance with the provisions of Subpart I of Part 21, applying to point-to-point operations. Nodal Station frequencies shall be assigned in the band from 10,565-10,615 MHz. User station frequencies shall be assigned in the band from 10,630-10,680 MHz.

Section 21.503 Frequency stability.

(a) In the frequency band 10,550 to 10,680 MHz, the frequency stability of Digital Termination Nodal and User Stations shall be $\pm 0.0003\%$.

(b) In the frequency band 17,700 to 19,700 MHz, the frequency stability of each Digital Termination Nodal Station transmitter authorized for this service shall be $\pm 0.001\%$. The frequency stability of each Digital Termination User Station transmitter authorized for this service shall be $\pm 0.003\%$.

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Section 21.506 Transmitter power.

The transmitter power will be governed by Section 21.107 of this rule part. Further, each application shall contain an analysis demonstrating compliance with Section 21.107(a).

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4. Subpart I is amended by revising sections 21.701 and 21.710 to read as follows:

Section 21.701 Frequencies.

(a) Frequencies in the following bands are available for assignment to fixed radio stations in the Point-to-Point Microwave Radio Service.

FREQUENCY BAND (MHz)				
932.5 to 935.0	.....	(17)		
941.5 to 944.0	.....	(17)	(18)	
2,110 to 2,130	.....	(1)	(3)	(7)
2,160 to 2,180	.....	(1)	(2)	(5)
3,700 to 4,200	.....	(5)	(8)	(19)
5,925 to 6,425	.....	(5)	(19)	(20)
6,525 to 6,575	.....	(19)	(20)	(22)
6,575 to 6,875	.....	(5)	(19)	(20) (21)
10,550 to 10,680	.....	(19)	(20)	
10,700 to 11,700	.....	(8)	(9)	(19)
13,200 to 13,250	.....	(4)		
17,700 to 18,820	.....	(5)	(10)	(15)
18,920 to 19,160	.....	(5)	(10)	(15)
19,260 to 19,700	.....	(5)	(10)	(15)
21,200 to 22,000	.....	(4)	(11)	(12) (13)
22,000 to 23,600	.....	(4)	(11)	(12)
27,500 to 29,500	.....	(5)		
31,000 to 31,300	.....	(16)		
38,600 to 40,000	.....	(4)		

Footnotes (1) to (18) * * *

(19) - Frequencies in this band are shared with stations in the Private Operational-Fixed Microwave Service (Part 94).

(20) - Frequencies in this band are shared with stations in the Public Mobile Services (Part 22).

(21) - Frequencies in this band are shared with stations in the International Control Services (Part 23).

(22) - The band segment 6,525-6,541.5 MHz is shared with space stations (earth to space) in the fixed-satellite service (Part 25).

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(b) * * *

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(c) Transmit and receive frequency pairs listed in this section are recommended, and are not mandatory, unless otherwise noted.

(d) Concatenation of multiple contiguous channels is permitted in the 5,925 to 6,425 MHz, 6,525 to 6,875 MHz, 10,550 to 10,680 MHz, and 10,700 to 11,700 MHz bands, provided that:

(1) No other channels of the desired bandwidth are available in the same band;

(2) All channels to be concatenated have equal bandwidths; and

(3) The center frequency of the concatenated channel is listed in this section (e.g., two 1.25 MHz channels may be concatenated into a 2.5 MHz channel having the same center frequency as a 5 MHz channel).

(e) * * * (formerly (c))

(f) 3,700 to 4,200 MHz.

(1) 20 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
3710	3990
3730	4010
3750	3950
3770	3970
3790	4070
3810	4090
3830	4030
3850	4050
3870	4150
3890	4170
3910	4110
3930	4130
n/a	4190 1

1 - These frequencies may be assigned for unpaired use.

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(2) 10 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
3710	3990
3730	4010
3750	3950
3770	3970
3790	4070
3810	4090
3830	4030
3850	4050
3870	4150
3890	4170
3910	4110
3930	4130
n/a	4190 1

1 - These frequencies may be assigned for unpaired use.

(g) 5,925 to 6,425 MHz. Transmitters authorized or pending on *[Report and Order date]*, employing frequencies that do not comply with this paragraph, are grandfathered and may continue their authorized operations. Additional non-standard frequencies may be authorized on a path, upon an appropriate showing that the prior use of non-standard frequencies precludes the use of standard frequencies to expand system capacity.

(1) 30 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
5945.20	6197.24
5974.85	6226.89
6004.50	6256.54
6034.15	6286.19
6063.80	6315.84
6093.45	6345.49
6123.10 1	6375.14 1
6152.75 1	6404.79 1

1 - Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

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(2) 10 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)		RECEIVE (transmit) (MHZ)
5935.32	.....	6187.36
5945.20	.....	6197.24
5955.08	.....	6207.12
5964.97	.....	6217.01
5974.85	.....	6226.89
5984.73	.....	6236.77
5994.62	.....	6246.66
6004.50	.....	6256.54
6014.38	.....	6266.42
6024.27	.....	6276.31
6034.15	.....	6286.19
6044.03	.....	6296.07
6053.92	.....	6305.96
6063.80	.....	6315.84
6073.68	.....	6325.72
6083.57	.....	6335.61
6093.45	.....	6345.49
6103.33	.....	6355.37
6113.22	1	6365.26 1
6123.10	1	6375.14 1
6132.98	1	6385.02 1
6142.87	1	6394.91 1
6152.75	1	6404.79 1
6162.63	1	6414.67 1

1 - Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

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(3) 5 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
6110.75	6362.79
6115.69	6367.73
6120.63	6372.67
6125.57	6377.61
6130.51	6382.55
6135.45	6387.49
6140.40	6392.44
6145.34	6397.38
6150.28	6402.32
6155.22	6407.26
6160.16	6412.20
6165.10	6417.14

(4) 3.75 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
6111.364	6363.404
6116.305	6368.345
6121.247	6373.287
6126.189	6378.229
6131.130	6383.170
6136.072	6388.112
6141.014	6393.054
6145.955	6397.995
6150.897	6402.937
6155.839	6407.879
6160.780	6412.820
6165.722	6417.762
6175.000 2	n/a

2 - These frequencies may be assigned for unpaired use.

Proposed FCC Rules and Regulations

(5) 2.5 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
5926.250	6178.125
5928.750	6180.625
6109.510	6361.550
6111.981	6364.021
6114.452	6366.492
6116.923	6368.963
6119.394	6371.434
6121.865	6373.905
6124.335	6376.375
6126.806	6378.846
6129.277	6381.317
6131.748	6383.788
6134.219	6386.259
6136.690	6388.730
6139.160	6391.200
6141.631	6393.671
6144.102	6396.142
6146.573	6398.613
6149.044	6401.084
6151.515	6403.555
6153.985	6406.025
6156.456	6408.496
6158.927	6410.967
6161.398	6413.438
6163.869	6415.909
6166.340	6418.380
6169.375	6421.250
6171.875	6423.750
6175.625 2	n/a

2 - These frequencies may be assigned for unpaired use.

Proposed FCC Rules and Regulations

(6) 1.25 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
5925.625	6177.500
5926.875	6178.750
5928.125	6180.000
5929.375	6181.250
6108.893	6360.933
6110.128	6362.168
6111.364	6363.404
6112.599	6364.639
6113.834	6365.874
6115.070	6367.110
6116.305	6368.345
6117.541	6369.581
6118.776	6370.816
6120.011	6372.051
6121.247	6373.287
6122.482	6374.522
6123.718	6375.758
6124.953	6376.993
6126.189	6378.229
6127.424	6379.464
6128.659	6380.699
6129.895	6381.935
6131.130	6383.170
6132.366	6384.406
6133.601	6385.641
6134.836	6386.876
6136.072	6388.112
6137.307	6389.347
6138.543	6390.583
6139.778	6391.818
6141.014	6393.054
6142.249	6394.289
6143.484	6395.524
6144.720	6396.760
6145.955	6397.995
6147.191	6399.231
6148.426	6400.466
6149.661	6401.701
6150.897	6402.937
6152.132	6404.172

Proposed FCC Rules and Regulations

(6) 1.25 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)		RECEIVE (transmit) (MHZ)
6153.368	.....	6405.408
6154.603	.....	6406.643
6155.839	.....	6407.879
6157.074	.....	6409.114
6158.309	.....	6410.349
6159.545	.....	6411.585
6160.780	.....	6412.820
6162.016	.....	6414.056
6163.251	.....	6415.291
6164.486	.....	6416.526
6165.722	.....	6417.762
6166.957	.....	6418.997
6168.750	.....	6420.625
6170.000	.....	6421.875
6171.250	.....	6423.125
6172.500	.....	6424.375
6173.750	2	n/a
6175.000	2	n/a
6176.250	2	n/a

2 - These frequencies may be assigned for unpaired use.

(7) 800 KHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)		RECEIVE (transmit) (MHZ)
5925.425	.....	6177.300
5926.250	.....	6178.125
5927.075	.....	6178.950
5927.925	.....	6179.800
5928.750	.....	6180.625
5929.575	.....	6181.450
6168.550	.....	6420.425
6169.375	.....	6421.250
6170.200	.....	6422.075
6171.050	.....	6422.925
6171.875	.....	6423.750
6172.700	.....	6424.575

Proposed FCC Rules and Regulations

(8) 400 KHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)	RECEIVE (transmit) (MHZ)
5925.225	6177.100
5925.625	6177.500
5926.050	6177.925
5926.450	6178.325
5926.875	6178.750
5927.275	6179.150
5927.725	6179.600
5928.125	6180.000
5928.550	6180.425
5928.950	6180.825
5929.375	6181.250
5929.775	6181.650
6168.350	6420.225
6168.750	6420.625
6169.175	6421.050
6169.575	6421.450
6170.000	6421.875
6170.400	6422.275
6170.850	6422.725
6171.250	6423.125
6171.675	6423.550
6172.075	6423.950
6172.500	6424.375
6172.900	6424.775

Proposed FCC Rules and Regulations

(h) 6,525 to 6,875 MHz. Systems authorized in this band shall meet the technical standards of sections 94.15 and 94.63. In addition, applicants shall use the prior coordination procedure of section 21.100(d).

(1) 10 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHZ)			RECEIVE (transmit) (MHZ)		
6545	1	.....	6715	1	
6555	1	.....	6725	1	
6565		.....	6735		
6585		.....	6745		
6595		.....	6755		
6605		.....	6765		
6615		.....	6775		
6625		.....	6785		
6635		.....	6795		
6645		.....	6805		
6655		.....	6815		
6665		.....	6825		
6675		.....	6835		
6685		.....	6845		
6695		.....	6855		
6705		.....	6865		
6535	2	.....	6575	2	

1 - These frequencies may be assigned for unpaired use.

2 - Available only for emergency restoration, maintenance bypass, or other temporary-fixed purposes. Such uses are authorized on a non-interference basis to other frequencies in this band. Interference analysis required by Section 94.63(a) does not apply to this frequency pair.